

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P510204

Luminaire Tested: **VERD-M-CA4-230-722-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-722-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 1050mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24166 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

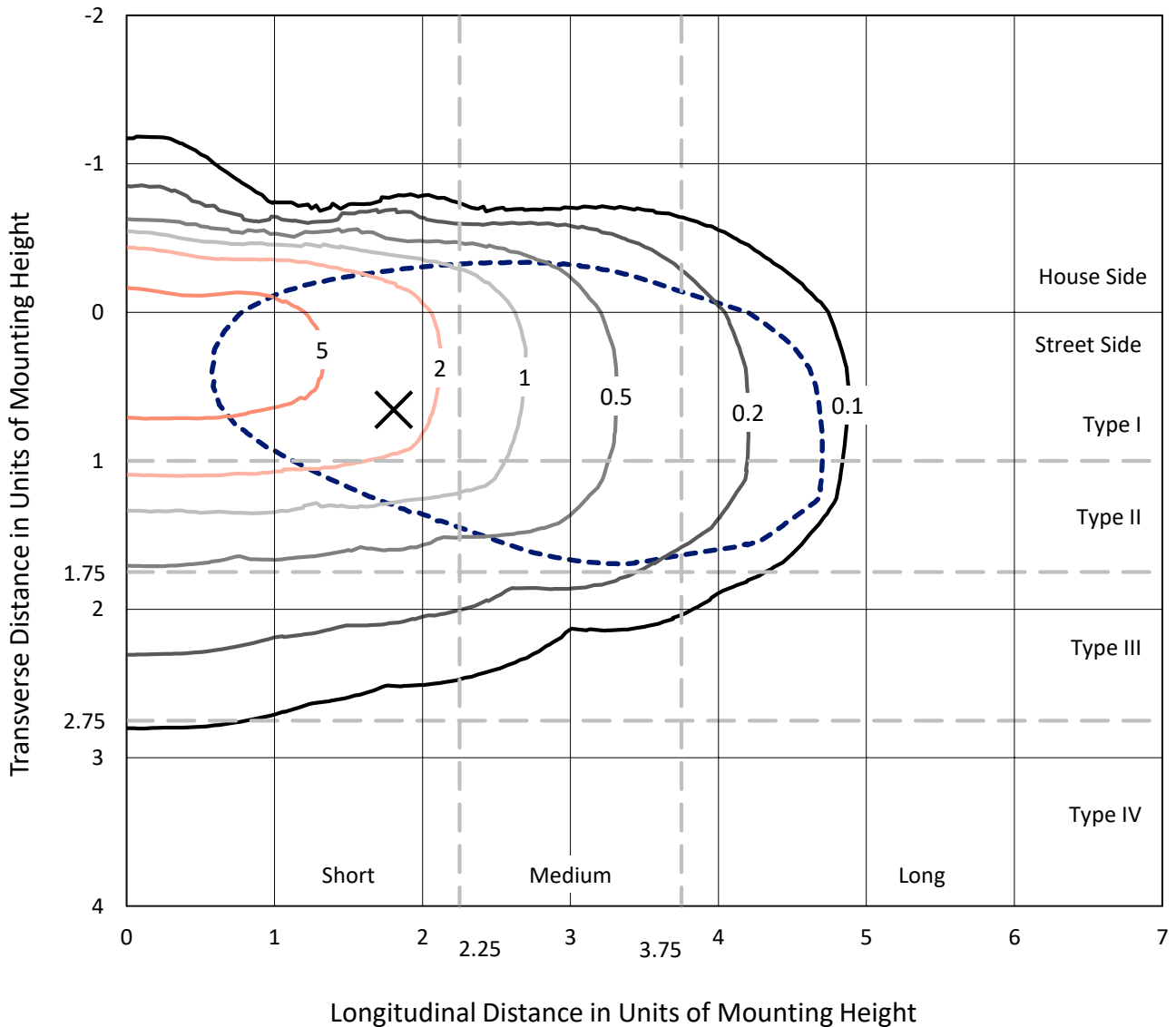
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

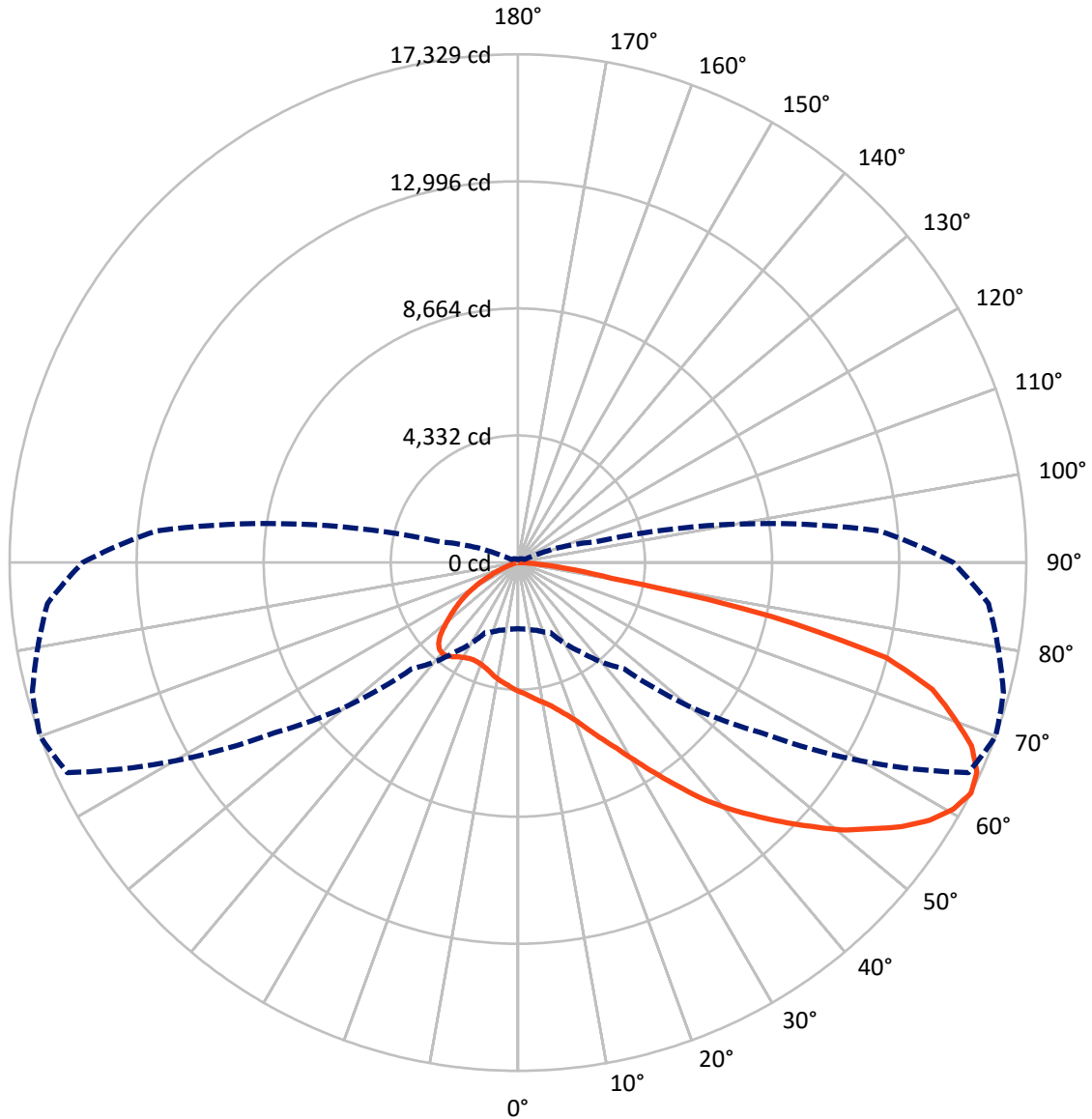
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5081.9	0.0	5081.9
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	19084.1	0.0	19084.1
	% Fixture	79.0	0.0	79.0
Total	Lumens	24166.0	0.0	24166.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.1	1.7
10°-20°	1244.8	5.2
20°-30°	2110.3	8.7
30°-40°	3103.3	12.8
40°-50°	4132.6	17.1
50°-60°	4834.3	20.0
60°-70°	4862.2	20.1
70°-80°	3077.8	12.7
80°-90°	383.5	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24166.0	100.0
0°-180°	24166.0	100.0

Coefficient of Utilization



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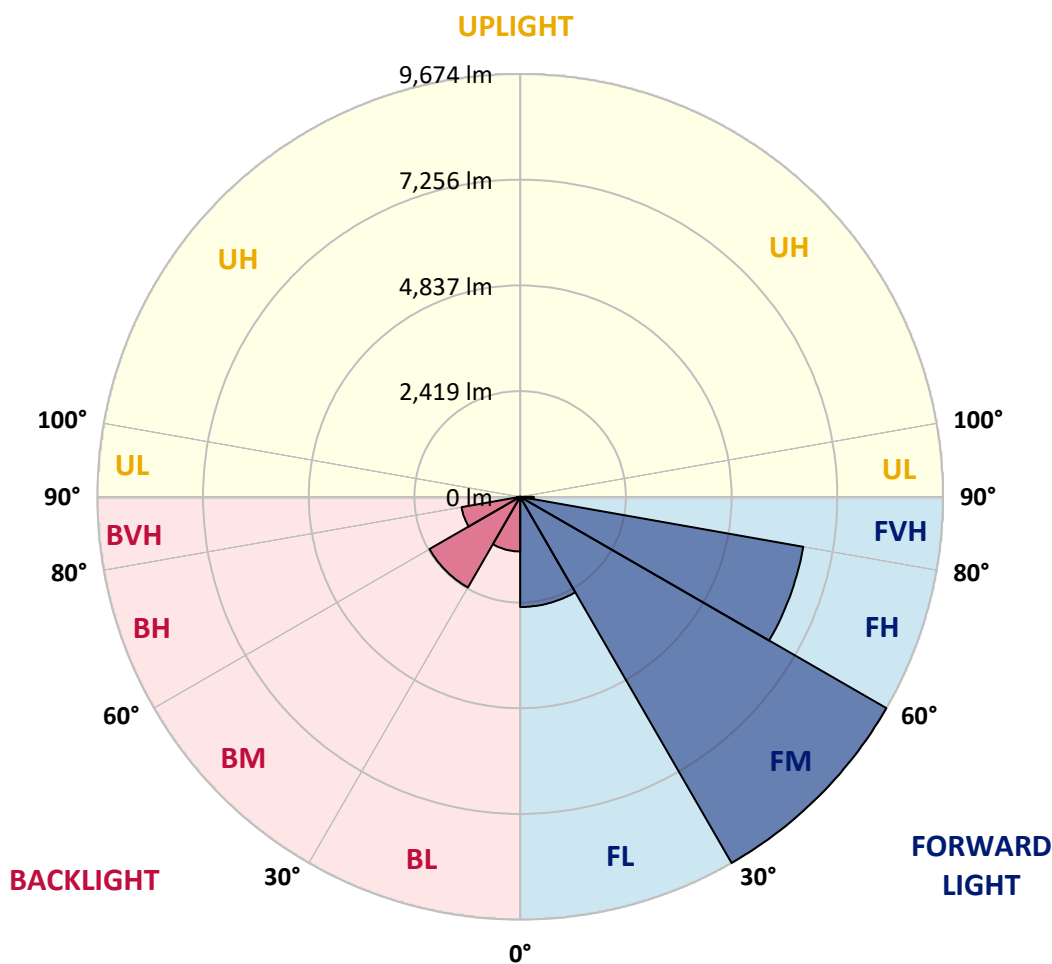
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2521.0	10.4			
FM (30°-60°)	9674.1	40.0			
FH (60°-80°)	6578.0	27.2			G3/7500
FVH (80°-90°)	311.0	1.3			G3/500
BL (0°-30°)	1251.2	5.2	B3/2500		
BM (30°-60°)	2396.2	9.9	B2/2500		
BH (60°-80°)	1362.0	5.6	B3/2500		G3/2500
BVH (80°-90°)	72.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3
2.5°	4634.4	4675.0	4644.0	4632.0	4641.6	4593.8	4555.6	4500.7	4474.5	4455.4	4424.4
5°	4869.5	4936.4	4895.8	4870.7	4867.1	4780.0	4728.7	4653.5	4595.0	4543.7	4464.9
7.5°	5117.8	5157.2	5141.7	5113.0	5093.9	4987.7	4897.0	4790.8	4726.3	4658.3	4525.8
10°	5335.0	5382.7	5367.2	5315.9	5298.0	5189.4	5085.6	4941.1	4852.8	4768.1	4585.5
12.5°	5559.4	5613.1	5580.9	5529.5	5514.0	5404.2	5296.8	5121.4	5011.6	4916.1	4663.1
15°	5765.9	5814.8	5792.1	5733.6	5718.1	5625.0	5506.9	5343.4	5224.0	5097.5	4772.9
17.5°	5930.6	5979.5	5950.9	5923.4	5918.6	5826.7	5756.3	5589.2	5475.8	5304.0	4941.1
20°	6051.1	6101.2	6086.9	6100.0	6150.2	6082.1	6039.2	5898.3	5782.6	5596.4	5183.4
22.5°	6146.6	6211.0	6268.3	6294.6	6387.7	6382.9	6373.4	6289.8	6199.1	6005.8	5472.3
25°	6156.1	6230.1	6343.5	6466.5	6635.9	6717.1	6776.8	6763.6	6657.4	6466.5	5872.1
27.5°	6170.5	6246.9	6363.8	6575.1	6878.2	7068.0	7167.0	7227.9	7165.9	7038.1	6326.8
30°	6139.4	6218.2	6365.0	6634.7	7044.1	7396.2	7572.8	7798.4	7805.6	7698.2	7013.1
32.5°	5998.6	6102.4	6280.3	6641.9	7205.2	7738.7	8010.9	8444.1	8538.4	8458.4	7720.8
35°	5763.5	5857.8	6112.0	6578.6	7303.1	8024.0	8521.7	9197.2	9336.9	9332.1	8553.9
37.5°	5503.3	5598.8	5885.2	6429.5	7366.4	8278.2	8971.6	9944.4	10222.4	10164.0	9340.4
40°	5215.7	5315.9	5646.5	6242.1	7335.3	8505.0	9447.9	10668.8	11013.7	11020.9	10092.4
42.5°	4881.5	4963.8	5295.6	5983.1	7232.7	8672.1	9890.6	11431.5	11794.3	11774.0	10801.3
45°	4561.6	4647.5	4937.6	5582.1	6995.2	8765.2	10325.1	12203.7	12601.1	12536.7	11589.0
47.5°	4174.9	4297.8	4628.4	5245.5	6628.8	8758.0	10704.6	12993.8	13440.2	13387.6	12269.3
50°	3212.9	3285.7	4034.1	4898.2	6132.3	8590.9	11075.8	13769.6	14334.1	14231.5	12995.0
52.5°	2894.3	2959.9	3201.0	4481.6	5681.1	8229.3	11384.9	14657.5	15080.0	15000.1	13736.1
55°	2735.5	2771.3	2918.1	3696.3	5240.7	7642.1	11591.4	15446.5	15885.7	15709.0	14429.6
57.5°	2536.2	2580.4	2751.0	3156.8	4698.9	6741.0	11543.7	16157.8	16563.6	16292.7	15040.7
60°	2383.4	2416.9	2576.8	2841.8	4139.1	5807.6	11055.5	16856.0	17060.1	16792.7	15649.4
62.5°	2254.5	2273.6	2385.8	2637.7	3713.0	5126.1	10103.1	16949.1	17328.6	17135.3	16102.9
65°	2094.6	2099.4	2231.9	2428.8	3319.2	4716.8	9285.5	16471.7	17195.0	17130.5	16266.4
67.5°	1907.2	1916.8	2050.5	2200.8	2845.3	4281.1	8012.1	16215.1	16675.8	16635.2	15943.0
70°	1672.1	1691.2	1814.1	1928.7	2409.7	3758.4	6376.9	15200.6	15747.2	15687.5	14877.1
72.5°	1445.3	1434.6	1549.2	1662.6	2007.5	3137.7	4833.7	13454.5	14770.9	14713.6	13492.7
75°	1187.5	1180.4	1298.5	1406.0	1645.9	2535.0	3400.3	9950.3	12978.3	13154.9	11634.4
77.5°	731.6	737.6	805.6	877.2	1114.7	1894.1	2169.8	5535.5	8816.5	10455.2	9130.4
80°	529.9	529.9	580.0	623.0	737.6	1154.1	1080.1	2308.3	3222.5	5046.2	5694.3
82.5°	343.7	329.4	360.4	397.4	410.6	500.1	494.1	1157.7	1642.3	1976.5	2371.5
85°	179.0	198.1	119.4	168.3	177.8	165.9	170.7	543.0	729.2	934.5	1028.8
87.5°	27.5	21.5	28.6	39.4	45.4	38.2	33.4	63.3	97.9	130.1	154.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3	4393.3
2.5°	4404.1	4398.1	4343.2	4263.2	4197.6	4142.7	4106.9	4083.0	4109.3	4061.5	4055.6
5°	4416.0	4375.4	4256.1	4141.5	4053.2	3935.0	3855.0	3801.3	3822.8	3781.1	3764.3
7.5°	4448.2	4374.2	4209.5	4026.9	3859.8	3733.3	3610.4	3492.2	3474.3	3448.1	3449.3
10°	4476.9	4370.6	4155.8	3917.1	3722.6	3499.4	3351.4	3229.6	3202.2	3171.2	3155.6
12.5°	4522.2	4379.0	4089.0	3800.1	3540.0	3282.2	3122.2	2979.0	2951.6	2890.7	2877.6
15°	4612.9	4408.8	4023.3	3655.7	3334.7	3074.5	2868.0	2742.7	2692.6	2624.5	2623.3
17.5°	4731.1	4496.0	3989.9	3519.7	3160.4	2869.2	2650.8	2524.3	2439.5	2399.0	2388.2
20°	4899.4	4609.3	3988.7	3396.7	2979.0	2649.6	2399.0	2255.7	2184.1	2150.7	2130.4
22.5°	5158.4	4776.4	4010.2	3310.8	2796.4	2437.2	2187.7	1990.8	1872.6	1780.7	1793.9
25°	5480.6	5027.1	4059.1	3232.0	2637.7	2234.3	1921.6	1648.2	1437.0	1345.1	1352.3
27.5°	5890.0	5326.7	4185.7	3152.1	2457.4	2015.8	1574.2	1226.9	1067.0	959.6	967.9
30°	6413.9	5699.0	4351.6	3090.0	2290.4	1710.3	1185.2	904.7	763.8	675.5	667.2
32.5°	7040.5	6238.5	4533.0	3048.2	2107.7	1328.4	854.6	663.6	526.3	476.2	483.4
35°	7816.3	6844.8	4809.9	2987.4	1795.0	945.3	609.9	448.8	378.3	368.8	370.0
37.5°	8524.1	7465.4	5084.4	2884.7	1416.7	671.9	414.1	341.3	325.8	322.2	327.0
40°	9217.5	8031.2	5332.6	2735.5	973.9	460.7	304.3	307.9	294.8	285.2	280.5
42.5°	9866.8	8576.6	5527.2	2461.0	666.0	304.3	269.7	280.5	278.1	259.0	250.6
45°	10567.4	9153.1	5634.6	2076.7	418.9	259.0	242.3	261.4	273.3	251.8	242.3
47.5°	11165.3	9715.2	5629.8	1591.0	284.1	244.7	228.0	244.7	259.0	243.5	235.1
50°	11855.2	10180.7	5477.0	1009.7	251.8	226.8	218.4	224.4	243.5	232.7	224.4
52.5°	12621.4	10818.0	5245.5	563.3	238.7	214.8	202.9	210.1	226.8	213.6	218.4
55°	13256.4	11346.7	4701.3	384.3	232.7	200.5	193.3	198.1	205.3	192.2	199.3
57.5°	13823.3	11783.6	4151.0	315.1	224.4	191.0	189.8	180.2	179.0	170.7	163.5
60°	14397.4	12128.5	3408.7	285.2	216.0	192.2	171.9	158.7	148.0	139.6	136.1
62.5°	14837.8	12367.2	2696.1	257.8	204.1	180.2	157.5	136.1	118.2	107.4	107.4
65°	14966.7	12261.0	1897.7	233.9	191.0	169.5	140.8	111.0	89.5	82.4	78.8
67.5°	14553.7	11651.1	1321.2	216.0	177.8	157.5	124.1	90.7	71.6	62.1	59.7
70°	13502.2	10630.6	779.4	191.0	161.1	137.3	113.4	74.0	58.5	48.9	46.5
72.5°	11948.3	9100.5	485.8	162.3	138.4	112.2	84.7	60.9	46.5	38.2	37.0
75°	9869.2	7094.2	317.5	125.3	109.8	88.3	64.4	48.9	40.6	32.2	29.8
77.5°	7914.2	5018.7	284.1	95.5	81.2	63.3	48.9	40.6	33.4	28.6	28.6
80°	4554.4	2864.4	232.7	65.6	50.1	47.7	38.2	33.4	31.0	27.5	26.3
82.5°	2237.8	1376.1	150.4	40.6	28.6	31.0	32.2	29.8	26.3	23.9	23.9
85°	771.0	458.3	60.9	26.3	19.1	19.1	20.3	21.5	20.3	19.1	19.1
87.5°	119.4	87.1	16.7	15.5	11.9	10.7	11.9	13.1	13.1	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)